

PTO-1449 REPRODUCED

ATTORNEY DOCKET NO.
0838.1003-001APPLICATION NO.
09/634,320SECOND SUPPLEMENTAL
INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

August 9, 2001

(Use several sheets if necessary)

APPLICANT
Mikhail I. PapisovFILING DATE
August 9, 2000GROUP
1614

U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
AN	WO 99 30561 A	24 Jun 1999	PCT			
AO	WO 00 78285 A	28 Dec 2000	PCT			
AP	WO 00 50050 A	31 Aug 2000	PCT			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

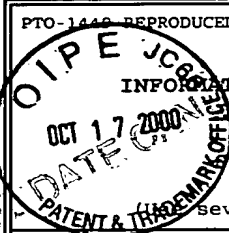
AS6	Hashida, M. et al., "Targeted delivery of plasmid DNA complexed with galactosylated poly(L-lysine)," <i>Journal of Controlled Release</i> 53:301-310 (1998).
AT6	Veronese F.M. and M. Morpurgo, "Bioconjugation in pharmaceutical chemistry," <i>Il Farmaco</i> 54:497-516 (1999).
AU6	Zangemeister-Wittke, U. et al., "Synergic cytotoxicity of bcl-2 antisense oligodeoxynucleotides and etoposide, doxorubicin and cisplatin on small-cell lung cancer cell lines," <i>British Journal of Cancer</i> 78(8):1035-1042 (1998).

EXAMINER


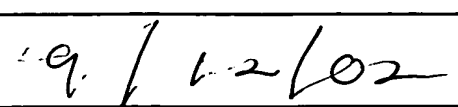
DATE CONSIDERED

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PTO-1449 REPRODUCED		ATTORNEY DOCKET NO. 0838.1003-001		APPLICATION NO. 09/634,320			
		APPLICANT Mikhail I. Papisov					
September 26, 2000		FILING DATE August 9, 2000		GROUP			
U.S. PATENT DOCUMENTS							
EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
J3	AA	5,574,142	Nov. 12, 1996	Meyer, Jr., et al.	536	23.1	
	AB						
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FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
J3	AL	WO 91/14696	3 Oct 1991	PCT			
	AM	WO 98/00172	8 Jan 1998	PCT			
	AN						
	AO						
	AP						
	AQ						
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
J3	AR	Dabrowiak, J.C., "MiniReview: Sequence Specificity of Drug-DNA Interactions", <i>Life Sciences</i> , 32:2915-2931 (1983).					
	AS	Vedaldi, D., et al., "Sequence Specificity in DNA for the Interaction with Adriamycin or Daunomycin", <i>Il Farmaco - Ed. Sc.</i> , 9:571-581 (1982).					
	AT	Chollet, A., "Selective Attachment of Oligonucleotides to Interleukin-1 β and Targeted Delivery to Cells", <i>Nucleosides & Nucleotides</i> , 9(7):957-966 (1990).					
EXAMINER J3 ~				DATE CONSIDERED 9/12/02			

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)					
93	AU	Searle, M.S., "NMR Studies of Drug-DNA Interactions", <i>Progress in NMR Spectroscopy</i> , 25:403-480 (1993).			
1	AV	Rajur, S.B., et al., "Covalent Protein-Oligonucleotide Conjugates for Efficient Delivery of Antisense Molecules", <i>Bioconjugate Chem.</i> , 8:935-940 (1997).			
	AW	McConnaughie, A.W. and Jenkins, T.C., "Novel Acridine-Triazenes as Prototype Combilexins: Synthesis, DNA Binding, and Biological Activity", <i>J. Med. Chem.</i> , 38:3488-3501 (1995).			
	AX	Morham, S.G. and Shuman, S., "Covalent and Noncovalent DNA Binding by Mutants of Vaccinia DNA Topoisomerase I*", <i>J. of Biol. Chem.</i> , 267(22):15984-15992 (1992).			
	AY	Hill, G.C., et al., "Computer Simulation of the Binding of Naphthyridinomycin and Cyanocycline A to DNA", <i>J. Med. Chem.</i> , 34:2079-2088 (1991).			
	AZ	Hope, M.J., et al., "Cationic lipids, phosphatidylethanolamine and the intracellular delivery of polymeric, nucleic acid-based drugs (Review)", <i>Molecular Membrane Biology</i> , 15:1-14 (1998).			
	AR2	Garbesi, A., et al., "Synthesis and binding properties of conjugates between oligodeoxynucleotides and daunorubicin derivatives", <i>Nucleic Acids Research</i> , 25(11):2121-2128 (1997).			
	AS2	Jolles, B., et al., "Comparison of DNA sequence selectivity of anthracycline antibiotics and their 3' -hydroxylated analogs", <i>Chemico-Biological Interactions</i> , 100:165-176 (1996).			
	AT2	Gao, Q., et al., "Drug-induced DNA repair: X-ray structure of a DNA-ditercalinium complex", <i>Proc. Natl. Acad. Sci. USA</i> , 88:2422-2426 (1991).			
✓	AU2	Kumar, S., et al., "Solution structure of a highly stable DNA duplex conjugated to a minor groove binder", <i>Nucleic Acids Research</i> , 26(3):831-838 (1998).			
EXAMINER		DATE CONSIDERED			
93		9/12/02			

PTO-149 (REPRODUCED)		ATTORNEY DOCKET NO. 0838.1003-001		APPLICATION NO. 09/634,320			
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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AV2	Cummings, J., et al., "Determination of Covalent Binding to Intact DNA, RNA, and Oligonucleotides by Intercalating Anticancer Drugs Using High-Performance Liquid Chromatography. Studies with Doxorubicin and NADPH Cytochrome P-450 Reductase", <i>Analytical Biochemistry</i> , 194:146-155 (1991).					
	AW2	Gao, Q., et al., "Drug-induced DNA repair: X-ray structure of a DNA-ditercalinium complex", <i>Proc. Natl. Acad. Sci. USA</i> , 88:2422-2426 (1991).					
	AX2	Cullinane, C., et al., "The DNA Sequence Specificity of Cyanomorpholinoadriamycin", <i>FEBS</i> , 293(1)(2):195-198 (1991).					
	AY2	Anderson, R.D., et al., "DNA Sequence Specificity of Doxorubicin-induced Mutational Damage in <i>uvrB</i> - <i>Escherichia coli</i> ", <i>Cancer Research</i> , 51:3930-3937 (1991).					
	AZ2	Trist, H. and Phillips, D.R., "In vitro transcription analysis of the role of flanking sequence on the DNA sequence specificity of Adriamycin", <i>Nucleic Acids Research</i> , 17(10):3673-3688 (1989).					
	AR3	Chaires, J.B., et al., "Site and Sequence Specificity of the Daunomycin-DNA Interaction", <i>Biochemistry</i> , 26:8227-8236 (1987).					
	AS3	Pearlman, L.F. and Simpkins, H., "The Differential Effects Produced by Daunomycin and Adriamycin on RNA, Polynucleotides, Single Stranded, Supercoiled DNA, and Nucleosomes", <i>Biochemical and Biophysical Research Communications</i> , 131(2):1033-1040 (1985).					
	AT3	Wang, L., et al., "Inhibition of Topoisomerase I Function by Nitidine and Fagaronine", <i>Chem. Res. Toxicol.</i> , 6:813-818 (1993).					
	AU3	Capranico, G., et al., "Change of the Sequence Specificity of Daunorubicin-stimulated Topoisomerase II DNA Cleavage by Epimerization of the Amino Group of the Sugar Moiety", <i>Cancer Research</i> , 55:312-317 (1995).					
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INFORMATION DISCLOSURE CITATION OCT 17 2000 IN AN APPLICATION OCT 18 2000 MAIL DATE CANCELLED PATENT & TRADEMARK OFFICE		APPLICANT Mikhail I. Papisov			
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U.S. PATENT DOCUMENTS					
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93	AV3	Capranico, G., et al., "Conformational Drug Determinants of the Sequence Specificity of Drug-stimulated Topoisomerase II DNA Cleavage", <i>J. Mol. Biol.</i> , 235:1218-1230 (1994).			
	AW3	Capranico, G., et al., "Unique Sequence Specificity of Topoisomerase II DNA Cleavage Stimulation and DNA Binding Mode of Streptonigrin", <i>J. Biol. Chem.</i> , 269(40):25004-25009 (1994).			
	AX3	Cullinane, C., et al., "Formation of adriamycin - DNA adducts in vitro", <i>Nucleic Acids Research</i> , 22(12):2296-2303 (1994).			
	AY3	Cullinane, C. and Phillips, D.R., "Sequence Specificity of (Cyanomorpholino) adriamycin Adducts in Human Cells", <i>Biochemistry</i> , 33:6207-6212 (1994).			
	AZ3	Garbesi, A., et al., "Synthesis and binding properties of conjugates between oligodeoxynucleotides and daunorubicin derivatives", <i>Nucleic Acids Research</i> , 25(11):2121-2128 (1997).			
	AR4	Cornarotti, M., et al., "Drug Sensivity and Sequence Specificity of Human Recombinant DNA Topoisomerases Ii α (p170) and Ii β (p180)", <i>The American Society for Pharmacology and Experimental Therapeutics</i> , 50:1463-1471 (1998).			
	AS4	Binaschi, M., et al., "Relationship between Lethal Effects and Topoisomerase II-Mediated Double-Stranded DNA Breaks Produced by Anthracyclines with Different Sequence Specificity", <i>The American Society for Pharmacology and Experimental Therapeutics</i> , 51:1053-1059 (1997).			
	AT4	Gao, Y., et al., "Substitutions at C2' of daunosamine in the anticancer drug daunorubicin alter its DNA-binding sequence specificity", <i>Am. J. Biochem.</i> , 240:331-335 (1996).			
✓	AU4	Sriram, M., et al., "Molecular Structure of Antitumor Drug Steffimycin and Modelling of its Binding to DNA", <i>J. Biomolecular Structure & Dynamics</i> , 9(2):251-269 (1991).			
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83	AV4	Pullman, B., "Sequence specificity in the binding of anti-tumor anthracyclines to DNA: a success of theory", <i>Anti-Cancer Drug Design</i> , 7:95-105 (1991).					
	AW4	van Houte, L.P.A., et al., "The Antitumor Drug Nogalamycin Forms Two Different Intercalation Complexes with d(GCGT)-d(ACGC)", <i>Biochemistry</i> , 32:1667-1674 (1993).					
	AX4	Capranico, G., et al., "Similar Sequence Specificity of Mitoxantrone and VM-26 Stimulation of in Vitro DNA Cleavage by Mammalian DNA Topoisomerase II", <i>Biochemistry</i> , 32:3038-3046 (1993).					
	AY4	D'Incalci, M., "DNA-topoisomerase inhibitors", <i>Current Opinion in Oncology</i> , 5:1023-1028 (1993).					
	AZ4	Kumar, S., et al., "Solution structure of a highly stable DNA duplex conjugated to a minor groove binder", <i>Nucleic Acids Research</i> , 26(3):831-838 (1998).					
	AR5	Phillips, D.R., et al., "DNA sequence-specific adducts of adriamycin and mitomycin C", <i>FEBS</i> , 246(1)(2):233-240 (1989).					
	AS5	Borgetto, M.E., et al., "Drug-specific Sites of Topoisomerase II DNA Cleavage in <i>Drosophila</i> Chromatin: Heterogeneous Localization and Reversibility", <i>Cancer Research</i> , 56:1855-1862 (1996).					
	AT5	Mee, S.L., et al., "S16020-2, a New Highly Cytotoxic Antitumor Olivacine Derivative: DNA Interaction and DNA Topoisomerase II Inhibition", <i>Molecular Pharmacology</i> , 53:213-220 (1998).					
	AU5	Patel, D.J., et al., "Hydrogen bonding, overlap geometry, and sequence specificity in anthracycline antitumor antibiotic: DNA complexes in solution", <i>Proc. Natl. Acad. Sci. USA</i> , 78(6):3333-3337 (1981).					
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93	AV5	Phillips, D.R., "Kinetics and Sequence Specificity of Drug-DNA Interactions: An in Vitro Transcription Assay", <i>Biochemistry</i> , 25:7355-7362 (1986).					
1	AW5	Skorobogaty, A., et al., "Elucidation of the DNA Sequence Preferences of Daunomycin", <i>Drug Design and Delivery</i> , 3:125-151 (1988).					
	AX5	Hook, R.J., et al., "Synthesis of polyamine-linked bis-daunomycin hydrazones and their interaction with DNA", <i>Anti-Cancer Drug Design</i> , 4:173-189 (1989).					
	AY5	Taatzes, D.J., et al., "Epidoxoform: A Hydrolytically More Stable Anthracycline-Formaldehyde Conjugate Toxic to Resistant Tumor Cells", <i>J. Med. Chem.</i> , 41:1306-1314 (1998).					
	AZ5	Rizzo, V., et al., "Association of Anthracyclines and Synthetic Hexanucleotides. Structural Factors Influencing Sequence Specificity", <i>J. Molec. Recognition</i> , 2(3):132-141 (1989).					
✓	AR6	Krugh, T.R., "Drug-DNA interactions", <i>Current Opinion in Structural Biology</i> , 4:351-364 (1994).					
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